PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

Not yet assigned - National Phase of PCT/JP2003/016823

Filing Date:

25 December 2003 (International Filing Date)

Applicant:

Kesatoshi TAKEUCHI

Group Art Unit:

Not yet assigned

Examiner:

Not yet assigned

Title:

A SAWTOOTH WAVE GENERATING APPARATUS, A METHOD

OF GENERATING SAWTOOTH WAVE, A CONSTANT CURRENT CIRCUIT. AND A METHOD OF ADJUSTING

AMOUNT OF CURRENT FROM THE SAME

Attorney Docket:

9319A-1147/NP

Director of the United States Patent and Trademark Office P.O. Box 1450

Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

I. <u>LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION</u>

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

II. COPIES

A. Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed, other than U.S. patents and U.S. patent application publications unless required by the Office; (iii) each unpublished U.S. application listed below in Section IV (i.e., including the specification, claims, and any drawing of the application, or that portion of the application which caused it to be listed, including any claims directed to that portion), except for such applications filed on or after June 30, 2003, pursuant to the Waiver of the Copy Requirement in 37 C.F.R. 1.98 (OG Notice dated

October 19, 2004); and (iv) all other information or that portion which caused it to
be listed. B. Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:
U.S. Serial Number U.S. Filing Date
C. Mational Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search report are listed on the attached Form 1449 for consideration by the Examiner and for listing on any patent resulting from this application. If the International Search report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g).) Any additional foreign patent documents or non-patent literature listed on the attached Form HDP-1449 that are not listed on the International Search Report are enclosed herewith.
CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)
A. Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).
B. A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):
 See the attached foreign patent office communication from a counterpart foreign application: International Search Report for PCT/JP2003/016823, Dated 08/17/2004
 English translations are provided: As noted on Form HDP-1449
3. Other:
C. \square The following additional information is provided for the Examiner's consideration.

111.

IV.	CROSS REFERENCE TO	RELATED APPLIC	ATION(S)		
	A. The Examiner is advised that the following co-pending application (contain(s) subject matter that may be related to the present application. Examiner this thinging this (these) application(s) to the Examiner's attention, Applicant(s) do (do) not waive the confidentiality provisions of 35 U.S.C. § 122.				
	Serial No.	Filing Date	<u>Art Unit</u>		
٧.	THIS IDS IS BEING FILE	D UNDER			
	A. 🖂 37 C.F.R. § 1.97(b)	: (check <u>only</u> one bo	ox)		
1. Within three months of the filing date of a national application of than a continued prosecution application under § 1.53(d) (37 C.F.R 1.97(b)(1)). No fee or certification is required.					
2. \boxtimes within three months of the date of entry of the national stage a forth in § 1.491 in an international application (37 C.F.R. § 1.97(b)(2)) fee or certification is required.					
	3. Defore the range of the first section of the sec	mailing of a first Offi fee or certification in the merits has be § 1.97(c) and see	ice Action on the merits (37 C.F.R. § is required. In the event that a first en issued, please consider this IDS the certification under 37 C.F.R. § has been made, charge our deposit .00 as required by 37 C.F.R. § 1.17(p).		
			fice Action after the filing of a request C.F.R. § 1.114. No fee or certification		
	В. 🗌 37 С.F.R. § 1.97((c): (check only one	box)		
	1.113, a Notice otherwise closes	of Allowance under s prosecution.	y Final Office Action under 37 C.F.R. § r 37 C.F.R. § 1.311, or an action that		
	1. ☐ No certific by 37 C.F.R. § 1	ation; therefore, a fe 1.17(p).	ee in the amount of \$180.00 is required		
	2. See the co	ertification below. N	lo fee is required.		

	C. [37 C.F.R. § 1.97(d):
	after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.
	1. See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).
/I.	CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)
	The undersigned hereby certifies that:
	A. each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F.R. 1.704(d) below in section VII, if applicable; or
	B. \square no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).
	C. some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.
VII.	STATEMENT UNDER 37 C.F.R. 1.704(d)
	The undersigned hereby states that:
	each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this IDS.

Respectfully submitted,

). Gregory *Si*cht leg. No *244*382

VIII. PAYMENT OF FEES (check only one box)

A. \square A check in the amount of \$180.00 is enclosed for the above identified fee.

B. Please charge Deposit Account No. 50-3213 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 50-3213.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 50-3213.

Dated: May 19,

Harness, Dickey & Pierce, P.L.C. P.O. Box 828 Bloomfield Hills, Michigan 48303 (248) 641-1600

GGS/smc



FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 1

ATTORNEY DOCKET NO.	SERIAL NO.		
9319A-1147/NP	10/535575		
APPLICANT			
Kesatoshi TAKEUCHI			
FILING DATE	GROUP		

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.		5,455,493 A	10/03/1995	Pulluru et al		
2.		6,369,665 B1	04/09/2002	Chee, et al		
3.		6,147,550 A	11/14/2000	Holloway		<u> </u>
4.		5,469,092 A	11/21/1995	Itakura		
5.		5,083,079 A	01/21/1992	Plants		

FORE	IGN PATEN	T DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No.	
1.		0 574 982 A	12/22/1993	EP			<u> </u>	
2.		93/24996 A	12/09/1993	WO				
3.		36 07 217 A	09/10/1987	DE			<u> </u>	
4.		03-243183	10/30/1991	JP		Abstract	ļ	
5.		03-289375	12/19/1991	JP		Abstract	ļ	
6.		11-180529	07/06/1999	JP		Yes		

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)					
Ref. Desig.	Examiner's Initials	Knopper G. J.: "Triggered Sawtooth Generator", Elektor Electronics, Elektor Publishers Ltd., Canterbury, GB, Vol. 17. No. 191, 1 July 1991 (1991-07-01), pages 66 - 67, XP000235698			

Everniner:	Date Considered:
Examiner:	

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.